OGDEN ARSENAL, BOMBPROOF SHELTER
(OGDEN ARSENAL, BUILDING 2132)
(OGDEN ARSENAL, BUILDING 1132)
(OGDEN ARSENAL, MUNITIONS STORAGE IGLOO)
East side of Lemon Street, between
New Hampshire and Browning Streets
Layton Vicinity
Davis Gounty
Utah

HAER No. UT-84-BG
HAER
UTAH
6-LAY.V,
1BG-

PHOTOGRAPHS

WRITTEN HISTORIGAL AND DESGRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
Rocky Mountain System Support Office
National Park Service
P.O. Box 25287
Denver, Colorado 80225-0287

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Location: East side of Lemon Street, between New Hampshire and Browning Streets, West Loading Plant, Hill Air Force Base, Layton Vicinity, Davis County, Utah

UTM: 12-415410-4555480

Date of Construction: 1942

Architect: Unknown

Builder: Unknown

Present Owner: Hill Air Force Base

Present Use: Munitions Storage

Significance: Building 2132 provides particularly vivid insight into the processes involved in the storage of highly explosive chemicals that were used in the production of ammunition at Ogden Arsenal. In addition, this building contributes to an understanding of the U.S. Army build-up which occurred on the eve of and during World War II.

History: The introduction of various types of ammunition manufacture at Ogden Arsenal during World War II necessitated the construction of many new buildings which took various forms as related to their specific functions within the overall manufacture and storage processes. Building 2132 was constructed in 1942 as part of the West Loading Plant. It was designed to store primers, fuzes, and raw chemicals that were used in the production of 37mm anti-tank ammunition.

Explosive components that were used in the production of 37mm anti-tank ammunition at Ogden Arsenal's West Loading Plant were stored in Bombproof Shelters like Building 2132 until they were needed in the loading lines or chemical processing buildings. Primers and fuzes were manufactured in other plants at the Arsenal and brought to the West Loading Plant by rail. Raw explosive chemicals, including tetryl,

phosphorus, and strontium were shipped to the Arsenal by rail from outside manufactures. These chemicals were usually packed in rubber cups that were placed in wood boxes and then loaded into wood crates. Large quantities of each of these components were stored in Bombproof Shelters like Building 2132; small quantities were transferred to individual rest houses (like Building 2001) for transient storage (usually 48 hours) until they reached the same temperature as the Loading & Assembly Line buildings (like Building 2213) or chemical processing buildings (like Building 1948). Any moisture that may have condensed on the packages evaporated during this stage.

Due to the highly explosive nature of the primers, fuzes, and chemicals that were stored in Building 2132, it was designed to minimize damage to additional buildings in the event of explosions. The igloo is covered with an earthen mound and separated from surrounding buildings by open land. A concrete apron with a sharp slope upward from the entry made fork lift operations outside igloos like Building 2132 a difficult task, so all items were loaded by hand until 1943. That year, a process was developed that kept automatic electric fork lift trucks with combination forks inside the igloos while a conveyor track was laid from rail cars or trucks into the doorway. This new process saved approximately one half the time previously used by hand loading alone, with half as many workers.

Building 2132 is similar to fourteen other igloos which still exist on Hill Air Force Base. They are all located within ammunition manufacturing plants, and include Buildings 1631-1633, 1651, 2107, 2100, 2131, 2132, 2138, 2206, 2207, 2231, 2232, and 2238.

General

Description: Building 2132 (36'-4" x 23'-0") is a double-sided, center passage igloo located in the original West Loading Plant area. The igloo walls, floor, and roof are of reinforced concrete and the roof and side walls are covered with an earthen mound. The building consists of two concrete rooms on either side of a concrete corridor that is open on both ends. The walls and roof are covered with earth and only the corridor is visible. Entry into the storage rooms is made from the corridor. The building originally was heated with an electric space heater. This type of igloo was the only type that was originally equipped with heat and electricity.